

PLEASE AMEND THE CLAIMS AS FOLLOWS:

1. (Currently amended) A purified and isolated polynucleotide ~~selected from the group consisting of:~~
~~_____ (a) _____ a polynucleotide encoding a polypeptide having the amino acid sequence of SEQ ID NO: 2, and~~
~~_____ (b) _____ a polynucleotide which is complementary to the polynucleotide of (a).~~
2. (Canceled) The polynucleotide of claim 1 wherein the polynucleotide comprises nucleotides selected from the group consisting of natural, non-natural and modified nucleotides.
3. (Canceled) The polynucleotide of claim 1 wherein the internucleotide linkages are selected from the group consisting of natural and non-natural linkages.
4. (Currently amended) The polynucleotide of claim 1 wherein the polynucleotide encoding the polypeptide of SEQ ID NO:2 is a DNA polynucleotide comprising the nucleotide polynucleotide sequence of SEQ ID NO: 1.
5. (Currently amended) A purified and isolated polynucleotide that is an expression vector comprising ~~[[a]]~~ the polynucleotide of claim 1.
6. (Currently amended) A purified and isolated host cell comprising the expression vector of claim 5.
7. (Currently amended) A process for expressing a MurC ~~protein~~ polypeptide of *Pseudomonas aeruginosa* in a recombinant host cell, comprising:
 - (a) transforming a suitable host cell with ~~[[an]]~~ the expression vector of claim 5;
 - and, (b) culturing the host cell of step (a) in and under conditions ~~under~~ which allow expression of said the MurC ~~protein~~ polypeptide from said expression vector.
8. (Currently amended) A purified and isolated polypeptide having the amino acid sequence of SEQ ID NO: 2.

9. (Currently amended) A method of determining whether a candidate compound is an inhibitor of a *Pseudomonas aeruginosa* MurC polypeptide comprising:

- (a) providing at least one host cell harboring an expression vector that includes a polynucleotide encoding a polypeptide having the amino acid sequence of SEQ ID NO: 2 and
- (b) contacting ~~at least one of said~~ at least one cell[[s]] with the candidate to permit the interaction of the candidate with the MurC polypeptide, and
- (c) determining whether the candidate is an inhibitor of the MurC polypeptide by ascertaining the ~~relative~~ activity of the polypeptide in the presence of the candidate.

10. (Currently amended) The method of claim 9 wherein the polynucleotide encoding a polypeptide having the amino acid sequence of SEQ ID NO: 2 has the ~~nucleotide~~ polynucleotide sequence of SEQ ID NO: 1.

11. (Currently amended) The method of claim 9 wherein the determination of activity in step (c) ~~the relative activity is determined by~~ comprises comparing a measurement of MurC polypeptide activity of said at least one cell before step (b) to a measurement of MurC polypeptide activity of said at least one cell after step (b).

12. (Withdrawn) A compound that is an inhibitor of a polypeptide having an amino acid sequence selected from the group consisting of

- (a) a polypeptide having an amino acid sequence of SEQ ID NO:2,
- (b) a polypeptide that is a naturally occurring mutant or polymorphic form of (a).

13. (Withdrawn) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an inhibitor of a polypeptide having an amino acid sequence selected from the group consisting of

- (a) a polypeptide having an amino acid sequence of SEQ ID NO:2,
- (b) a polypeptide that is a naturally occurring mutant or polymorphic form of (a).

14. (Withdrawn) A method of treatment of a patient in need of prophylactic or therapeutic treatment for a bacterial infection comprising administering to the patient an effective amount of an inhibitor of a polypeptide having an amino acid sequence selected from the group consisting of

- (a) a polypeptide having an amino acid sequence of SEQ ID NO:2,

(b) a polypeptide representing a naturally occurring mutant or polymorphic form of (a).

15. (Currently amended) A method of determining whether a candidate compound is an inhibitor of a *Pseudomonas aeruginosa* MurC polypeptide comprising:

- (a) providing a sample that includes a MurC polypeptide having the amino acid sequence of SEQ ID NO: 2, and
- (b) contacting said sample with the candidate to permit the interaction of the candidate with the MurC polypeptide, and
- (c) determining whether the candidate is an inhibitor of the MurC polypeptide by ascertaining the ~~relative~~ activity of the MurC polypeptide in the presence of the candidate.

16. (Canceled) The method of claim 15 wherein the polypeptide has the amino acid sequence of SEQ ID NO:2.

17. (Original) The method of claim 15 wherein in step (c) the relative activity is determined by comparing a measurement of MurC polypeptide activity of the sample before step (b) to a measurement of MurC polypeptide activity of the sample after step (b).